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On the nomenclature of a taxon in the family *Pieridae* (*Lepidoptera*) with remarks on the taxonomical studies in Turkey

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Abstract: On the nomenclature of a taxon in the family *Pieridae* (*Lepidoptera*) with remarks on the taxonomical studies in Turkey. *Centr. Ent. Stud., Misc. Pap.* 52: 1-3.

In this paper, a new name *Pieris brassicae* ssp.*scientialis* (nom. nov.) is proposed for the name ssp. *brassicoides* Staudinger, 1901 (preoccupied by *Pieris brassicoides* Guérin-Méneville, 1849). Besides, the present status of the taxonomical studies in Turkey have been explained and their future has been discussed.

Key words: *Pieris*, *brassicae*, *brassicoides*, *scientialis*, *Pieridae*, *Lepidoptera*, Kirgizistan, nomenclature, nomen novum, taxonomic research, Turkey, survive.

This paper deals with not only a preoccupied name in the family *Pieridae* Duponchel, 1835 in Kirgizistan, but also the status of the taxonomic researches and their workers in Turkey. The progressive activities in science, and their interpretations by the bureaucrats are evaluated. Finally, the future of the unique private international research centre of Entomology in Turkey (CESA) is discussed under the current circumstances.

Pieris brassicae subsp.*scientialis* (nom.nov.)

Pieris brassicae subsp. *scientialis* nomen novum pro *Pieris brassicae* var. *brassicoides* Staudinger, 1901, Cat. Lepid. Palaearct. Faunengeb. 3(1): 10. Nr. 45e. (nomen novum pro var. *nepalensis* Groum-Grshimailo, 1890, in Romanoff, Mém. Lépid. 4: 214 nec var. *nepalensis* Doubleday, 1846 List. Lepid. Br. Mus. 1: 32). Type (s): "Fergana" nec *Pieris brassicoides* Guérin-Méneville, 1849, Voyage en Abyssinie (4) 6 (Zoologie): 365, Pl. 9 figs. 3-6. Ethiopia: "Abyssinie".

Pieris brassicae brassicoides Staudinger: Hanus, et al., 1997, *Linneana Belg.* 16(2): 90. "Kirghizie: dans la vallée du Karabalty, 2100m 8/8/1993".

Etymology: This name is dedicated to all taxonomists in the world, who respect the sacredness of this knowledge. By this inoffensive way, an indignation action has been initiated against some people's current indignities in Turkish universities to our all scientific activities for years. This indignity covers the misinterpretation of some basic human rights, arbitrary usage of legal systems and favouritism for non-scientific approaches.

In Turkey, the taxonomical researches and the studies concerning biodiversity have not been given an importance anticipated by the academic bureaucrats. On the contrary, they have been treated as of no account, the progressive activities for this branch have been either

bypassed or prevented explicitly. They simply instructed to ignore the ICZN's¹ rules. Today, there is not still a natural history museum in Turkey. This is one of the inevitable result of such non-scientific, narrow-minded bureaucratic approaches. On the other hand, due to their unadvised position, the Turkish universities have not any infrastructure and basic scientific conception at present, regarding the museology on the natural history; therefore, their situation on this respect worse than it can be imagined. It is a pity that all these cases mentioned are the reverse process to Atatürk's² Principles, guiding to his Turkish inheritors.

As to us, our entomological studies were centered (CESA)³ by myself at Ankara in 1988. Although a natural history museum has not been established in Turkey so far, Museum of the CESA has been fulfilling this scientific mission in an international meaning with an extra-ordinary effort and success. Foreign or native researchers, who are interested in taxonomy, faunistics, ecology, forestry, agriculture, conservation, as well as the students of the postgraduate programmes of the biology departments of various universities. They have been benefiting from the various services of the Museum of CESA since 1988.

CESA was recognized by about sixty foreign scientific institutions (natural history museums, universities, societies etc.) so far. Unfortunately, there has not been a Turkish Institution, collaborating with us. The successor of CESA will be a foreign natural history museum ultimately⁴, if we should not be offered appropriate research conditions in Turkey immediately, not the reverse just as mentioned above.

Literature:

¹ ICZN. The International Code of Zoological Nomenclature.

² Atatürk ("Father of the Turks"), one of the great figures of the 20th century, Atatürk rescued the surviving Turkish remnant of the defeated Ottoman Empire at the end of World War I.

Countries with strong nationalist leaders were more successful in modernizing education. Mustafa Kemal Atatürk of Turkey, who was determined to create a modern state, initiated a dramatic program of social and cultural change in which education played an important role. He launched a compulsory adult education project, in 1933, reorganized Istanbul University into a modern institution staffed mainly by refugees from Nazi Germany. Later, Istanbul Technical University also reorganized and Ankara University was established. Educational reforms were pursued, but the particular pattern was profoundly affected by the traditional behaviour of the Turkish academicians. Therefore, these important reforms did not produce the anticipated results. Prof.Dr. Philippe Schwarz reported this case officially about 60 years ago. Strong efforts were made to universalize primary education, to upgrade technical and vocational education, and to improve the quality of education generally. Despite large investments, it was unable to coordinate scientific understanding between some Turkish academicians and bureaucrats, even today. Unfortunately, the modern universal scientific understanding remained small and elitist. Consequently, the quality of the academicians are very seldom adequate at present.

Atatürk is omnipresent in Turkey. His portrait is in every place of business and on the postage and bank notes. His words are chiseled on important buildings. Turkish politicians, regardless of party affiliation, claim to be the inheritors of Atatürk's mantle, but none has matched his breadth of vision, dedication, and selflessness.

³ The CESA (*Centre for Entomological Studies, Ankara*) supports entomological researches, which are based on its collection of natural-history specimens (especially Lepidoptera), and it organizes the expeditions, publishes the results of the studies, which has been carried out in the CESA. It also functions as an educational centre for the postgraduate students.

⁴ "The Fourth Edition of the International Code of Zoological Nomenclature, including these changes amongst others, will come into effect on 1 January 1999. The Third Edition of the Code will remain in force until then...Summary of changes Proposals of new names: When the name-bearing type of a species-group taxon proposed after 1998 consists of a preserved specimen or specimens, the proposal will be required to include a statement naming the public institution (not private collection) in which the name-bearing type will be deposited..." © International Trust for Zoological Nomenclature iczn@nhm.ac.uk || ICZN Home Updated 15 October 1997

Guérin-Méneville, F.E., 1849, Ordre des Lépidoptères. Famille des diurnes. In Lefebvre, T., *Voyage en Abyssinie* (4) 6 (Zoologie): 365-386, Pl.

Hanus, J., Hoareau, D., Manon, D. & P. Manon, 1997, Vacances entomologiques en Kirghizie (Lepidoptera, Rhopalocera) (suite et fin). *Linneana Belg.* 16(2): 79-96.

Staudinger, O., 1901, in Staudinger & Rebel, *Catalog der Lepidopteren des palaearctischen Faunengebietes*. Bd.3, Theil 1. Berlin.

A Tentative List of the Threatened Butterflies in Turkey

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Selma Seven (EN)

Abstract: A tentative list of the threatened butterflies in Turkey. *Centr. Ent. Stud., Misc. Pap.* 52: 3-8.

In this paper, totally 293 butterflies of Turkey are listed with their threat categories. The status of the research workers in Turkey is indicated in the footnote.

Key words: Butterflies, Turkey, endanger, survive, taxonomist.

This paper deals with the threatened butterflies of Turkey. Totally 293 taxa (species or subspecies) are listed tentatively with their threat categories. For the nomenclature of the taxa the following publications used: Koçak (1981-1984; 1996), Hesselbarth et al. (1995); Koçak & Seven (1998).

The explanation of the threat categories adopted are based on the publication by Walter, K.S. and Gillett, H.J. [eds] (1998). The determination of the categories have been made by using the personal field experiments of the authors in Turkey, for many years, literary data, and also the distributional patterns of the relevant taxa (cf. also Koçak & Seven, a final report accepted by the Ministry of Environment in 1994 but unpublished so far). Most of the threatened taxa have been allowed here in an indeterminated status, since further reearches are needed about their appropriate categories. A number of taxa have been determinated here as “vulnerable” as their scattered populations are currently decreasing under the various anthropogene disturbance. For the time being, only a few taxa have been determinated as “endangered” and “rare”.

The Categories and their Explanations (after Walter, K.S. and Gillett, H.J. [eds] (1998)).

Extinct (Ex) Taxa that are no longer known to exist in the wild after repeated searches of the type localities and other known or likely places.

Extinct/Endangered (Ex/EN) Taxa possibly considered to be extinct in the wild.

Endangered (EN) Taxa in danger of extinction and whose survival is unlikely if the causal factors continue operating. Included are taxa whose numbers have been reduced to a critical level or whose habitats have been so drastically reduced that they are deemed to be in immediate danger of extinction.

Vulnerable (VU) Taxa believed likely to move into the Endangered category in the near future if the causal factors

⁵ These authors are also in danger of extinction in Turkey. Their survival is unlikely, if the causal factors continue operating. The Turkish authorities must be protective to their own scientists' legal rights against privileged and untouchable few, if they really would like to realize their some fantasies such as preventing their butterflies, plants or natural resources endangered. The indication “EN” will remain in our every scientific publication in future, until the causal factors removed explicitly. The responsibility of this attitude belongs wholly to me (A.Ö.K.). Some related publications: Koçak, A.Ö. & S. Seven, 1997, Negros Papilionoidea, Hesperioidea Faunası ve Taksonomisi Üzerine Araştırmalar (Lepidoptera) (Filipin Entomolojik Ekspedisyonu Sonuçları-IV). *Priamus* 9(2/3): 57-114, 1 harita.- Seven, S., 1997, Afrika'dan bir Lycaenidae Türünün Nomenklatürü Hakkında (Lepidoptera). *Centr. Ent. Stud., Misc. Pap.* 48: 1-2, 1 Harita.- Koçak, A.Ö., 1997, Editörden Mektup. *Priamus* 9(2/3): 115- Koçak, A.Ö., 1998, On the nomenclature of a taxon in the family Pieridae (Lepidoptera) with remarks on the taxonomical studies in Turkey. *Centr. Ent. Stud., Misc. Pap.* 52: 1-3-and many unpublished documents.

continue operating. Included are taxa of which most or all the populations are decreasing because of over-exploitation, extensive destruction of habitat or other environmental disturbance; taxa with populations that have been seriously depleted and whose ultimate security is not yet assured; and taxa with populations that are still abundant but are under threat from serious adverse factors throughout their range.

Rare (RA) Taxa with small world populations that are not at present Endangered or Vulnerable but are at risk. These taxa are usually localised within restricted geographic areas or habitats or are thinly scattered over a more extensive range.

Indeterminate (IN) Taxa known to be Extinct, Endangered, Vulnerable, or Rare but where there is not enough information to say which of the four categories is appropriate.

* indicates the taxa, which their taxonomical status needs further researches.

LIST OF THE BUTTERFLIES THREATENED

PAPILIONIDAE

1. *Papilio* (s.str.) *alexanor eitschbergeri* Bollino & Sala, 1992-- VU
2. *Papilio* (s.str.) *alexanor orientalis* Romanoff, 1884-- VU
3. *Papilio* (s.str.) *machaon cypria* Verity, [1908]*-- VU
4. *Papilio* (s.str.) *machaon syriacus* Pfeiffer, 1931-- VU
5. *Ipheclides podalirius smyrnensis* (Eimer, 1889)*-- IN
6. *Ipheclides podalirius virgatus* (Butler, 1865)*-- IN
7. *Zerynthia* (*Allanacstria*) *caucasica abanti* Koçak, 1975*-- VU
8. *Zerynthia* (*Allanacstria*) *caucasica caucasica* (Lederer, 1864)-- VU
9. *Zerynthia* (*Allanacstria*) *cerisyi cerisyi* (Godart, 1822)-- VU
10. *Zerynthia* (*Allanacstria*) *cerisyi ferdinandi* (Stichel, 1907)-- EN
11. *Zerynthia* (*Allanacstria*) *deyrollei deyrollei* (Oberthür, 1869)-- VU
12. *Archon apollinaris apollinaris* (Staudinger, [1892])-- VU
13. *Archon apollinus amasinus* (Staudinger, 1901)-- VU
14. *Archon apollinus apollinus* (Herbst, 1798)-- VU
15. *Archon apollinus bellargus* (Staudinger, 1892)-- VU
16. *Archon apollinus forsteri* Koçak, 1977-- VU
17. *Archon apollinus nikodemusi* Stüning & Wagener, 1989-- VU
18. *Archon apollinus thracicus* (Buresch, 1915)-- VU
19. *Parnassius* (*Driopa*) *mnemosyne caucasica* Verity, [1911]-- VU
20. *Parnassius* (*Driopa*) *mnemosyne elisabethae* Bryk & Eisner, 1934-- VU
21. *Parnassius* (*Driopa*) *mnemosyne sheljuzhko* Bryk, 1914-- VU
22. *Parnassius* (*Driopa*) *nordmanni nordmanni* [Menetries], [1850]-- RA
23. *Parnassius* (*Driopa*) *nordmanni thomai* De Freina, 1980-- RA
24. *Parnassius* (s.str.) *apollo graslini* Oberthür, 1891-- VU
25. *Parnassius* (s.str.) *apollo tirabzonus* Sheljuzhko, 1924-- VU

PIERIDAE

26. *Leptidea morsei major* Lorkovic, 1927-- IN
27. *Anthocharis cardamines phoenissa* Kalchberg, 1895-- IN
28. *Anthocharis damone eunomia* (Freyer, [1851])-- VU
29. *Anthocharis gruneri armeniaca* Christoph, 1893-- VU
30. *Anthocharis gruneri gruneri* Herrich-Schäffer, [1851]-- VU
31. *Anthocharis gruneri parnassia* Bernardi, 1970-- VU
32. *Euchloe* (*Elphinstonia*) *penia penia* (Freyer, [1852])-- IN

33. *Euchloe* (s.str.) *ausonia taurica* Röber, [1907]-- IN
34. *Euchloe* (s.str.) *belemia belemia* (Esper, [1800])-- IN
35. *Pieris* (*Artogeia*) *bowdeni bowdeni* Eitschberger, 1984-- IN
36. *Pieris* (*Artogeia*) *bryoniae goergneri* Eitschberger, 1986-- IN
37. *Pieris* (*Artogeia*) *bryoniae turcica* Eitschberger & Hesselbarth, 1977-- IN
38. *Pieris* (*Artogeia*) *ergane detersa* Verity, [1908]-- IN
39. *Pieris* (*Artogeia*) *krueperi krueperi* Staudinger, 1860-- IN
40. *Pieris* (*Artogeia*) *mannii hethaea* Pfeiffer, 1931-- IN
41. *Pieris* (*Artogeia*) *mannii mannii* (Mayer, 1851)-- IN
42. *Pontia callidice chrysidice* (Herrich-Schäffer, [1844])-- IN
43. *Pontia chloridice chloridice* (Hübner, [1813])-- IN
44. *Zegris eupheme menestho* (Ménétriés, 1832)-- RA
45. *Colias alfajariensis bergeri* Reissinger, 1989*-- IN
46. *Colias alfajariensis fontainei* Reissinger, 1989*-- IN
47. *Colias aurorina aurorina* Herrich-Schäffer, [1850]-- IN
48. *Colias caucasica caucasica* Staudinger, 1871-- IN
49. *Colias chlorocoma chlorocoma* Christoph, 1888-- RA
50. *Colias thisoa thisoa* Ménétriés, 1832-- IN
51. *Gonepteryx* (*Isogonepteryx*) *cleopatra taurica* (Staudinger, 1881)-- IN

LIBYTHEIDAE

52. *Libythea celtis* (Laicharting, 1782)-- IN

ARGYNNIDAE (=NYMPHALIDAE)

53. *Limenitis camilla camilla* (Linnaeus, 1764)-- IN
54. *Limenitis reducta* Staudinger, 1901-- IN
55. *Charaxes jasius jasius* (Linnaeus, 1767)-- VU
56. *Apatura metis metis* Freyer, 1829-- VU
57. *Eupatúra mirza mirza* Ebert, 1971-- EN
58. *Thaleropsis ionia ionia* (Eversmann, 1851)-- VU
59. *Araschnia levana levana* (Linnaeus, 1758)-- VU
60. *Nymphalis antiopa antiopa* (Linnaeus, 1758)-- VU
61. *Nymphalis polychloros* (Linnaeus, 1758)-- VU
62. *Aglais urticae turcica* (Staudinger, 1871)-- IN
63. *Inachis io io* (Linnaeus, 1758)-- VU
64. *Polygonia c-album c-album* (Linnaeus, 1758)-- IN
65. *Polygonia egea egea* (Cramer, [1775])-- IN
66. *Argynnis* (s.str.) *paphia paphia* (Linnaeus, 1758)-- IN
67. *Argynnis* (*Mesoacidalia*) *aglaia aglaia* (Linnaeus, 1758)-- IN
68. *Argynnis* (*Mesoacidalia*) *aglaia ottomana* (Röber, 1896)-- IN
69. *Argynnis* (*Fabriciana*) *adippe adippe* ([Denis & Schiffermüller], 1775)-- IN
70. *Argynnis* (*Fabriciana*) *adippe taurica* Staudinger, 1878-- IN

71. *Argynnis* (Fabriciana) *niobe orientalis* Alpheraky, 1881-- IN
72. *Boloria* (Clossiana) *dia* (Linnaeus, 1767)-- IN
73. *Boloria* (Clossiana) *euphrosyne euphrosyne* (Linnaeus, 1758)-- IN
74. *Boloria* (s.str.) *caucasica caucasica* (Lederer, 1852)-- IN
75. *Boloria* (s.str.) *graeca karina* Van Oorschot & Wagener, 1990-- IN
76. *Brenthis daphne daphne* (Bergsträsser, 1780)-- IN
77. *Brenthis hecate hecate* ([Denis & Schiffermüller], 1775)-- IN
78. *Brenthis hecate transcaucasica* Wnukowsky, 1929-- IN
79. *Brenthis ino ino* (Rottemburg, 1775)-- IN
80. *Brenthis ino schmitzi* Wagener, 1983-- IN
81. *Brenthis mofidii zabensis* Leestmans & Carbonell, 1993-- IN
82. *Melitaea arduinna evanescens* Staudinger, 1886-- IN
83. *Euphydryas aurinia* (Rottemburg, 1775)-- IN
84. *Euphydryas orientalis orientalis* (Herrich-Schäffer, [1846])-- IN

SATYRIDAE

85. *Melanargia grumi grumi* Standfuss, 1892-- IN
86. *Melanargia russiae caucasica* Nordmann, 1851-- IN
87. *Melanargia syriaca karabagi* Koçak, 1976-- IN
88. *Melanargia syriaca kocaki* Wagener, 1983-- IN
89. *Melanargia syriaca syriaca* (Oberthür, 1894)-- IN
90. *Melanargia titea wiskotti* Röber, 1896-- IN
91. *Hipparchia* (Parahipparchia) *mersina mersina* (Staudinger, 1871)-- IN
92. *Hipparchia* (Parahipparchia) *pellucida pellucida* (Stauder, 1924)-- IN
93. *Hipparchia* (Parahipparchia) *volgensis delattini* Kudrna, 1975-- IN
94. *Hipparchia* (s.str.) *syriaca cypriaca* (Staudinger, 1871)-- VU
95. *Hipparchia* (s.str.) *syriaca syriaca* (Staudinger, 1871)-- IN
96. *Erebia ligea* (Linnaeus, 1758)-- IN
97. *Erebia medusa* ([Denis & Schiffermüller], 1775)-- IN
98. *Erebia ottomana ottomana* Herrich-Schäffer, [1847]-- IN
99. *Proterebia afra afra* (Fabricius, 1787)-- IN
100. *Brintesia circe* (Fabricius, 1775)-- IN
101. *Chazara* (s.str.) *bischoffi bischoffi* (Herrich-Schäffer, [1846])-- IN
102. *Chazara* (s.str.) *egina aisha* Rose, 1986-- IN
103. *Minois dryas* (Scopoli, 1763)-- IN
104. *Pseudochazara anthelea anthelea* (Hübner, [1824])-- IN
105. *Pseudochazara anthelea selcuki* Van Oorschot et al., 1987-- IN
106. *Pseudochazara aurantiaca aurantiaca* (Staudinger, 1871)-- IN
107. *Pseudochazara beroe altivolans* Gross, 1978-- IN
108. *Pseudochazara beroe beroe* (Freyer, [1843])-- IN
109. *Pseudochazara geyeri geyeri* (Herrich-Schäffer, [1846])-- IN
110. *Pseudochazara lydia aurora* Eckweiler & Rose, [1989]-- IN
111. *Pseudochazara lydia lydia* (Staudinger, 1878)-- IN
112. *Pseudochazara lydia nesrin* Koçak, 1989*-- IN
113. *Pseudochazara lydia obscura* (Staudinger, 1878)-- IN
114. *Pseudochazara mamurra birgit* Gross, 1978-- IN
115. *Pseudochazara mamurra mamurra* (Herrich-Schäffer, [1846])-- IN
116. *Pseudochazara mamurra schahrudensis*

- (Staudinger, 1881)-- IN
117. *Pseudochazara mnischevii caucasica* (Lederer, 1864)-- IN
118. *Pseudochazara mnischevii mnischevii* Herrich-Schäffer, [1851]-- IN
119. *Pseudochazara mnischevii tisiphone* Brown, 1980-- IN
120. *Pseudochazara schakuhensis brandti* (Holik, 1949)-- IN
121. *Satyrus amasinus amasinus* Staudinger, 1861-- IN
122. *Satyrus amasinus iranicus* Schwingenschuss, 1939-- IN
123. *Satyrus favonius blomi* Oemig, 1978-- IN
124. *Satyrus favonius favonius* Staudinger, 1892-- IN
125. *Hyponephele kocaki kocaki* Eckweiler, 1978-- IN
126. *Hyponephele lycaon bugrai* Koçak, 1989-- IN
127. *Hyponephele lycaon collina* (Röber, 1897)-- IN
128. *Hyponephele urartua urartua* De Freina & Aussem, [1987]-- IN
129. *Hyponephele wagneri wagneri* (Herrich-Schäffer, [1846])-- IN
130. *Idata cecilia cecilia* (Vallantin, 1894)-- LR (Tarrier, 1998) IN
131. *Maniola halicarnassus halicarnassus* Thomson, 1990-- IN
132. *Pyronia tithonus tithonus* (Linnaeus, 1767)-- IN
133. *Coenonympha arcania arcania* (Linnaeus, 1761)-- IN
134. *Coenonympha glycerion alta* Sheljuzhko, 1937-- IN
135. *Coenonympha leander dierli* Koçak, 1977-- IN
136. *Coenonympha leander leander* (Fabricius, 1787)-- IN
137. *Coenonympha symphita symphita* Lederer, 1870-- IN
138. *Kirinia roxelana* (Cramer, [1777])-- IN
139. *Lasiommata maera orientalis* (Heyne, [1894])-- IN
140. *Lasiommata megera* (Linnaeus, 1767)-- IN
141. *Pararge aegeria* (Linnaeus, 1758)-- IN

RIODINIDAE

142. *Hamearis lucina lucina* (Linnaeus, 1758)-- IN

LYCAENIDAE

143. *Thecla betulae* (Linnaeus, 1758)-- IN
144. *Callophrys chalybeitincta chalybeitincta* Sovinsky, 1905-- IN
145. *Callophrys mystaphia mystaphia* Miller, 1912-- IN
146. *Callophrys paulae paulae* Pfeiffer, 1932-- IN
147. *Satyrium* (Nordmannia) *armenum armenum* (Rebel, 1901)-- IN
148. *Satyrium* (Nordmannia) *marcidum mardinum* Oorschot et al., 1985-- IN
149. *Satyrium* (Strymonidia) *w-album w-album* (Knoch, 1782)-- IN
150. *Satyrium* (Superflua) *hyrcanicum cyri* Nekrutenko, 1978-- IN
151. *Satyrium* (Superflua) *ledereri ledereri* (Boisduval, 1848)-- IN
152. *Satyrium* (Superflua) *sassanides sassanides* (Kollar, [1849])-- IN
153. *Cigaritis acamas acamas* (Klug, 1834)-- IN
154. *Cigaritis cilissa cilissa* Lederer, 1861-- IN
155. *Cigaritis maxima maxima* Staudinger, 1901-- IN
156. *Tomares callimachus callimachus* (Eversmann, 1848)-- IN
157. *Tomares callimachus dentata* (Staudinger, 1892)-- IN
158. *Tomares nesimachus nesimachus* (Oberthür, 1893)-- IN
159. *Tomares nogelii aurantiaca* (Staudinger, 1901)-- IN
160. *Tomares nogelii nogelii* (Herrich-Schäffer, [1851])-- IN
161. *Tomares romanovi maculifera* (Staudinger, 1892)-- IN
162. *Tomares romanovi romanovi* (Christoph, 1882)-- IN

163. Cupido (Everes) argiades (Pallas, 1771)-- IN
164. Cupido (s.str.) minimus albocilia Oorschot et al., 1984-- IN
165. Glaucopsyche (Apelles) astraia astraia (Freyer, [1851])-- IN
166. Glaucopsyche (Apelles) astraia eckweileri Koçak, 1979-- IN
167. Iolana iolas lessei Bernardi, 1964-- VU
168. Maculineaalconalcon ([Denis & Schiffermüller], 1775)-- IN
169. Maculinea arion (Linnaeus, 1758)-- IN
170. Maculinea nausithous nausithous (Bergsträsser, 1779)-- IN
171. Pseudophilotes vicrama astabene (Hemming, 1932)-- IN
172. Rubrapterus bavius eitschbergeri (Koçak, 1975)-- IN
173. Rubrapterus bavius ssp.n.-- IN
174. Rubrapterus bavius vanicola (Koçak, 1977)-- IN
175. Scolitantides orion (Pallas, 1771)-- IN
176. Turanana cytis kurdistanica Eckweiler, 1984-- IN
177. Turanana endymion endymion (Freyer, [1850])-- IN
178. Plebejus (Lycæides) argyrognomon caspicus (Forster, 1936)-- IN
179. Plebejus (Lycæides) idas altarmena Forster, 1936-- IN
180. Plebejus (s.str.) argus aegidion (Meisner, 1818)-- IN
181. Polyommatus (Agriades (s.str.)) pyrenaicus (Boisduval, 1840)-- IN
182. Polyommatus (Agriades (s.str.)) pyrenaicus dardanus (Freyer, [1844])-- IN
183. Polyommatus (Agriades (s.str.)) pyrenaicus yusuf (Koçak & Seven, 1995)-- IN
184. Polyommatus (Albulina (Plebejidea)) loewii loewii (Zeller, 1847)-- IN
185. Polyommatus (Albulina (Vacciniina)) alcedo alcedo (Christoph, 1877)-- IN
186. Polyommatus (Albulina (Vacciniina)) rosei rosei (Eckweiler, 1989)-- IN
187. Polyommatus (Aricia (Eumedonia)) eumedon aladaghensis (Koçak, 1979)-- IN
188. Polyommatus (Aricia (Eumedonia)) eumedon eumedon (Esper, [1780])-- IN
189. Polyommatus (Aricia (Pseudoaricia)) hyacinthus hyacinthus (Herrich-Schäffer, 1847)-- IN
190. Polyommatus (Aricia (Pseudoaricia)) isauricus isauricus (Staudinger, 1871)-- IN
191. Polyommatus (Aricia (Pseudoaricia)) teberdinus nahizericus (Eckweiler, 1978)-- IN
192. Polyommatus (Aricia (Pseudoaricia)) torulensis torulensis Hesselbarth & Siepe, 1993-- IN
193. Polyommatus (Aricia (Ultraaricia)) anteros anteros (Freyer, [1838])-- IN
194. Polyommatus (Aricia (Ultraaricia)) bassoni bassoni (Larsen, 1974)-- IN
195. Polyommatus (Aricia (Ultraaricia)) crassipunctus crassipunctus (Christoph, 1893)-- IN
196. Polyommatus (Aricia (s.str.)) artaxerxes macedonicus (Verity, 1936)-- IN
197. Polyommatus (s.str. (Admetusia)) antidolus antidolus (Rebel, 1901)-- IN
198. Polyommatus (s.str. (Admetusia)) antidolus kurdistanicus (Forster, 1961)-- IN
199. Polyommatus (s.str. (Admetusia)) interjectus interjectus (De Lesse, 1960)-- IN
200. Polyommatus (s.str. (Admetusia)) menalcas menalcas (Freyer, 1837)-- IN
201. Polyommatus (s.str. (Admetusia)) mithridates mithridates (Staudinger, 1878)-- IN
202. Polyommatus (s.str. (Admetusia)) mithridates saetosus (Pfeiffer, 1932)-- IN
203. Polyommatus (s.str. (Admetusia)) phyllis vanensis (De Lesse, 1957)-- IN
204. Polyommatus (s.str. (Agrodiaetus)) anticarmon anticarmon (Koçak, 1983)-- IN
205. Polyommatus (s.str. (Agrodiaetus)) atys artvinensis (Carbonell, 1997)-- IN
206. Polyommatus (s.str. (Agrodiaetus)) atys atys (Gerhard, [1851])-- IN
207. Polyommatus (s.str. (Agrodiaetus)) baytopi baytopi (De Lesse, 1959)-- IN
208. Polyommatus (s.str. (Agrodiaetus)) dama dama (Staudinger, 1892)-- IN
209. Polyommatus (s.str. (Agrodiaetus)) eurytilos eurytilos (Gerhard, [1851])-- IN
210. Polyommatus (s.str. (Agrodiaetus)) eurytilos munzuricus (Rose, 1978)-- IN
211. Polyommatus (s.str. (Agrodiaetus)) firdussii ernesti Eckweiler, 1989-- IN
212. Polyommatus (s.str. (Agrodiaetus)) firdussii maraschi (Forster, 1956)-- IN
213. Polyommatus (s.str. (Agrodiaetus)) firdussii sertavulensis (Koçak, 1979)-- IN
214. Polyommatus (s.str. (Agrodiaetus)) hopfferi lycius (Carbonell, 1996)-- IN
215. Polyommatus (s.str. (Agrodiaetus)) hopfferi hopfferi (Gerhard, 1851)-- IN
216. Polyommatus (s.str. (Agrodiaetus)) iphicarmon iphicarmon Eckweiler & Rose, 1993-- IN
217. Polyommatus (s.str. (Agrodiaetus)) iphigenia araratensis (De Lesse, 1957)-- IN
218. Polyommatus (s.str. (Agrodiaetus)) iphigenia barthae (Pfeiffer, 1932)-- IN
219. Polyommatus (s.str. (Agrodiaetus)) iphigenia iphigenia (Herrich-Schäffer, [1847])-- IN
220. Polyommatus (s.str. (Agrodiaetus)) merhaba merhaba De Prins, 1991-- IN
221. Polyommatus (s.str. (Agrodiaetus)) poseidon poseidon (Herrich-Schäffer, [1851])-- IN
222. Polyommatus (s.str. (Agrodiaetus)) tankeri tankeri (De Lesse, 1960)-- IN
223. Polyommatus (s.str. (Agrodiaetus)) theresiae theresiae Schurian et al., 1992-- IN
224. Polyommatus (s.str. (Agrodiaetus)) transcaspicus turcicola (Koçak, 1977)-- IN
225. Polyommatus (s.str. (Agrodiaetus)) transcaspicus zapvadi (Carbonell, 1993)-- IN
226. Polyommatus (s.str. (Agrodiaetus)) turcicus turcicus (Koçak, 1977)-- IN
227. Polyommatus (s.str. (Agrodiaetus)) wagneri wagneri (Forster, 1956)-- IN
228. Polyommatus (s.str. (Cyaniris)) bellis antiochena (Lederer, 1861)-- IN
229. Polyommatus (s.str. (Lysandra)) coridon (Poda, 1761)-- IN
230. Polyommatus (s.str. (Lysandra)) corydonius corydonius (Herrich-Schäffer, [1852])-- IN
231. Polyommatus (s.str. (Lysandra)) dezinus dezinus Freina & Witt, 1983-- IN
232. Polyommatus (s.str. (Lysandra)) ossmar ankara Schurian & Hoffmann, 1983-- IN
233. Polyommatus (s.str. (Lysandra)) ossmar olympicus Lederer, 1852-- IN
234. Polyommatus (s.str. (Lysandra)) ossmar ossmar (Gerhard, [1851])-- IN
235. Polyommatus (s.str. (Lysandra)) syriacus burak

- Koçak,1992-- IN
 236.Polyommatus (s.str. (Meleageria)) buzulmavi buzulmavi Carbonell,[1992]-- IN
 237.Polyommatus (s.str. (Neolysandra)) coelestinus alticola (Christoph,1893)-- IN
 238.Polyommatus (s.str. (Neolysandra)) coelestinus ponticus (Courvoisier,1911)-- IN
 239.Polyommatus (s.str. (Neolysandra)) diana diana (Miller,1912)-- IN
 240.Polyommatus (s.str. (Plebicula)) dorylas dorylas ([Denis & Schiffermüller],1775-- IN
 241.Polyommatus (s.str. (Plebicula)) escheri escheri (Hübner,[1823])-- IN
 242.Polyommatus (s.str. (Sublysandra)) cornelius anatolicus (Koçak,1975)*-- IN
 243.Polyommatus (s.str. (Sublysandra)) cornelius cornelius (Freyer,[1850])-- IN
 244.Polyommatus (s.str. (Sublysandra)) myrrhinus araxianus (Koçak,1980)-- IN
 245.Polyommatus (s.str. (Sublysandra)) myrrhinus myrrhinus (Staudinger,1901)-- IN
 246.Polyommatus (s.str. (Sublysandra)) myrrhinus noacki (Koçak,1980)-- IN
 247.Polyommatus (s.str. (Sublysandra)) myrrhus hakkariensis Koçak,1977-- IN
 248.Polyommatus (s.str. (Sublysandra)) myrrhus myrrhus (Herrich-Schäffer,[1852])-- IN
 249.Polyommatus (s.str.) ciloicus ciloicus De Freina & Witt,1983-- IN
 250.Polyommatus (s.str.) eroides eroides (Frivaldsky,1835)-- IN
 251.Polyommatus (s.str.) eroides yildizae Koçak,1977-- IN
 252.Polyommatus (s.str.) eros molleti Carbonell,[1994]-- IN
 253.Heodes (Alciphronia) alciphron melibaeus (Staudinger,1878)-- IN
 254.Heodes (Loweia) tityrus tityrus (Poda,1761)-- IN
 255.Heodes (Palaeochrysophanus) candens candens (Herrich-Schäffer,[1845])-- IN
 256.Heodes (s.str.) ottomanus ottomanus (Lefebvre,[1830])-- IN
 257.Heodes (s.str.) virgaureae aureomicans (Heyne,1897)-- IN
 258.Lycaena (s.str.) phlaeas phlaeas (Linnaeus,1761)-- IN
 259.Lycaena (s.str.) phlaeas timeus (Cramer,[1777])*-- IN
 260.Phoenicurusia euphratica euphratica Eckweiler,1989-- IN
 261.Phoenicurusia phoenicurus phoenicurus (Lederer,1870)-- IN
 262.Thersamonia (Thersamolycaena) dispar rutilus

- (Werneburg,1864)-- IN
 263.Thersamonia (s.str.) asabinus asabinus (Herrich-Schäffer,[1851])-- IN
 264.Thersamonia (s.str.) asabinus satraps (Staudinger,1879)-- IN
 265.Thersamonia (s.str.) asabinus tauricus (Heyne,[1895])-- IN
 266.Thersamonia (s.str.) kefersteinii kefersteinii (Gerhard,[1850])-- IN
 267.Thersamonia (s.str.) lampon lampon (Lederer,1870)-- IN
 268.Thersamonia (s.str.) thersamon thersamon (Esper,[1784])-- IN
 269.Thersamonia (s.str.) thetis thetis (Klug,1834)-- IN

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- 270.Carcharodus (Lavatheria) lavatherae tauricus Reverdin,1915-- IN
 271.Carcharodus (Reverdinus) orientalis orientalis Reverdin,1913-- IN
 272.Erynnis marloyi marloyi (Boisduval,[1834])-- IN
 273.Muschampia nomas nomas (Lederer,1855)-- IN
 274.Muschampia poggei poggei (Lederer,1858)-- IN
 275.Muschampia proteides proteides (Wagner,1929)-- IN
 276.Muschampia proto aragonensis (De Sagarra,1924)-- IN
 277.Muschampia tessellum tessellum (Hübner,[1802])-- IN
 278.Pyrgus aladaghensis aladaghensis De Prins & Poorten,1995-- IN
 279.Pyrgus alveus alveus (Hübner,[1803])-- IN
 280.Pyrgus armoricanus armoricanus (Oberthür,1910)-- IN
 281.Pyrgus bolkariensis bolkariensis De Prins & Poorten,1995-- IN
 282.Pyrgus carthami carthami (Hübner,[1813])-- IN
 283.Pyrgus cinarae cinarae (Rambur,[1839])-- IN
 284.Pyrgus jupei jupei (Alberti,1967)-- IN
 285.Pyrgus serratulae major (Staudinger,1878)-- IN
 286.Pyrgus sidae sidae (Esper,[1784])-- IN
 287.Spialia (s.str.) osthelderi osthelderi (Pfeiffer,1932)-- IN
 288.Spialia (s.str.) phlomidis phlomidis (Herrich-Schäffer,[1845])-- IN
 289.Hesperia comma pallida Staudinger,1901-- IN
 290.Thymelicus acteon acteon (Rottemburg,1775)-- IN
 291.Thymelicus hyrax hyrax (Lederer,1861)-- IN
 292.Carterocephalus palaemon palaemon (Pallas,1771)-- IN
 293.Heteropterus morpheus morpheus (Pallas,1771)-- IN

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